CONTENTS OF VOL. 231

ORIGINAL ARTICLES

No. 1.—January

Studies on N-allylnormorphine in Man: Antagonism to Morphine and Heroin and Effects of Mixtures of N-allylnormorphine and Morphine. By H. F. Fraser, M.D., G. D. Van Horn, and Harris Isbell, M.D., Lexington, Kentucky . . . 1

Ten-Year Prognosis of Acute Myocardial Infarction. By Morris M. Weiss, M.D., Louisville, Kentucky . . . 9

The Skin Response to a Nicotinic Acid Ester: An Acute Phase Reaction. By William Weiss, Capt., USAF (MC), Parks Air Force Base, California. . . . 13

Nicotinic Acid Blood Levels in Relation to the Skin Response to a Nicotinic Acid Ester Ointment. By William Weiss, Capt., USAF (MC), Parks Air Force Base, California . . . 20

Clinical Evaluation of Diuretic Mersoben. By Robert H. Chaney, M.D., and Robert F. Maronde, M.D., Los Angeles, California. . . . 26

Treatment of Pemphigus with Potassium, Para-aminobenzoate. By C. J. D. Zarafonetis, M.D., A. C. Curtis, M.D., and J. M. Shaw, M.D., Philadelphia, Pennsylvania, and Ann Arbor, Michigan . . . 30

Theophylline Concentration in Blood Plasma Following Rectal Administration of Aminophylline. By George B. Jerzy Glass, M.D., Harry Barowsky, M.D., Linn J. Boyd, M.D., Marilyn Rich, A.B., and Leonard Ebin, M.D., New York, New York . . . 51

The Effects of Thyrotropin and Desiccated Thyroid upon Hypothyroidism with Goiter. By Richard P. Levy, M.D., Luther W. Kelly, Jr., M.D., and William McK. Jefferies, M.D., Cleveland, Ohio . . . 61

A Study of the "Flat" Oral Gucose Tolerance Curve and Its Relation to Rate of Emptying of the Stomach. By Charles E. Test, M.D., Russell L. Nichols, M.D., Richard L. Landau, M.D., Henry T. Ricketts, M.D.. and Ruth Loughead, S.B., Indianapolis, Indiana, Philadelphia, Pennsylvania, and Chicago, Illinois . . . 69

Some Studies on Freezing and Thawing Human Erythrocytes. By Stanley C. Glauser, M.S., M.D., and Timothy R. Talbot, M.D., Philadelphia, Pennsylvania . . . 75

A Preliminary Study of Small Bowel Mucoproteins in Tropical Sprue. By Frank H. Gardner, Capt., MC, and Calixto Romero, Capt., MC, San Juan, Puerto Rico 82

A Clinical Evaluation of the Use of a Rectal Mercurial Diuretic on Patients with Chronic Congestive Heart Failure. By Norman Makous, M.D., Paul Jennings, M.D., Elmer H. Funk, Jr., M.D., and Joseph B. Vander Veer, M.D., Philadelphia, Pennsylvania 86

No. 2.—February

Two Kinds of Renal Hypertension. By Thomas Findley, M.D., Augusta, Georgia 121

Clinical Value and Significance of Unipolar Right Arm Lead in Hypertension. By Desiderio Gross, M.D., Santiago, Chili 125

Renal Response to Pentolinium: Laboratory Observations. By John H. Moyer, M.D., and Carroll A. Handley, Ph.D., Houston, Texas 134

Treatment of the Ambulatory Hypertensive Patient with Pentolinium Tartrate. By Samuel Waldman, M.D., and Louis Pelner, M.D., Brooklyn, New York 140

Coccidioides Immitis in the Soil of the Southern San Joaquin Valley. By Roger O. Egeberg, M.D., and Ann Frank Ely, M.D., Los Angeles, California 151

Diagnostic Significance of Changes in Free, Esterified and Protein-bound Cholesterol, Lipo- and Glyco-proteins in Lymphoma and Multiple Myeloma. By Sergio I. Magalani, M.D., Mario Stefanini, M.D., and Hector M. Marin, M.D., Boston, Massachusetts 155

The Degree of Coronary and Aortic Atherosclerosis in Necropsied Cases of Multiple Myeloma. By David M. Spain, M.D., Irving J. Greenblatt, Ph.D., Isidore Snapper, M.D., and Theodore Cohn, M.D., Brooklyn, New York 165

Myocarditis in Viral (Epidemic) Hepatitis. By Otto Saphir, M.D., George D. Amromin, M.D., and H. Yokoo, M.D., Chicago, Illinois. 168

Observations on the Source of Elevated Plasma Ammonia Levels in Hepatic Insufficiency. By Hyman J. Zimmerman, M.D., and R. J. Korn, M.D., Chicago, Illinois 177

Clinical Experience with Acetyl-Digitoxin: Preliminary Report. By Martin Goldfarb, M.D., M. C. Thorner, M.D., and George C. Griffith, M.D., Los Angeles, California 186

Studies on Elorine Sulfate, An Anticholinergic Drug. By William H. Bachrach, M.D., and Herbert Schapiro, M.S., Los Angeles, California 192

Metabolic and Pathologic Effects of Renin in Nephrectomized Rats. By G. M. C. Masson, Ph.D., F. del Greco, M.D., A. C. Corcoran, M.D., and Irvine H. Page, M.D., Cleveland, Ohio 198

The Effect of Estrogen Therapy on Patients with Angina Pectoris. By Billy B. Oliver, M.D., and Ben Friedman, M.D., McKinney, Texas, and Dallas, Texas 205

No. 3.—March

Complications of Meningococcus Infection in a Series of Sixty-three Consecutive Sporadic Cases. By James L. Tobin, Col., USAF, MC, Sampson Air Force Base, New York 241

Exfoliative Gastric Cytology. By Leo van der Reis, M.D., J. Alfred Rider, M.D., Ph.D., and John K. Frost, M.D., San Francisco, California 249

Epidemiological Aspects of Cases of Blastomycosis Admitted to Memphis, Tennessee, Hospitals During the Period 1922–1954: A Review of 86 Cases. By Ernest W. Chick, M.D., Wheelan D. Sutliff, M.D., Jennie H. Rakich, R.N., and Michael L. Furcolow, M.D., Kansas City, Kansas, and Memphis, Tennessee 253

Joint and Bone Disease Due to Mycotic Infection. By Elam C. Toone, Jr., M.D., and John Kelly, M.D., Richmond, Virginia 263

Further Observations on the Cardiovascular Effects of Sodium Lactate: Effect in Normal Subjects and in Various Arrhythmias. By Samuel Bellet, M.D., Fred Wasserman, M.D., and Jerome I. Brody, M.D., Philadelphia, Pennsylvania 274

The Use of Iodipamide Methylglucamine (Cholografin High Potency) as a Contrast Medium for Intravenous Cholangiography. By J. Edward Berk, M.D., Sc.D., Harry Z. Mellins, M.D., and Marvin Brodie, M.D., Detroit, Michigan 289

The Effect of Pentolinium on Renal Hemodynamics and Water and Electrolyte Excretion: A Comparison with Hexamethonium. By John H. Moyer, M.D., and Robert L. Hershberger, M.D., Houston, Texas 294

The Relation Between Appearance and Behavior of the Islands of Langerhans in Man. By Francis D. W. Lukens, M.D., and W. Wallace Dyer, M.D., Philadelphia, Pennsylvania 313

No. 4.—April

Clues to Better Understanding of the Nature and Treatment of Certain Infectious Diseases. By Theodore E. Woodward, M.D., Baltimore, Maryland 369

The Problem of Subclinical Rheumatic Carditis. By C. George Tedeschi, M.D., and Bernard M. Wagner, M.D., Philadelphia, Pennsylvania 382

Treatment of Urinary Tract Infection with Triple Sulfonamides and a Penicillin-Triple Sulfonamide Mixture. A Comparative Study. By A. Waite Bohne, M.D., and William E. Chase, M.D., Detroit, Michigan 389

Induced Azotemia in Humans Following Massive Protein and Blood Ingestion and the Mechanism of Azotemia in Gastrointestinal Hemorrhage. By Theodore D. Cohn, M.D., Montague Lane, M.D., Seymour Zuckerman, M.D., Nathaniel Messinger, M.D., and Aubrey Griffith, M.D., Bethesda 14, Maryland and Brooklyn, New York 394

Hemorrhagic Diathesis with Increased Capillary Fragility Caused by Salicylate Therapy. By Paul G. Frick, M.D., Ph.D., Minneapolis, Minnesota 402

The Interacting Effects of Public Health, Fertility Behavior and General Economy on Standards of Living: IV. Characterization of Thresholds and Stages of Development in the Bioeconomic Mechanism. By Alexander Langer, M.D., and Paul S. Henshaw, Ph.D., New York, New York 407

The Effect of Cortisone on the Growth of Adult and Embryonic Tissues *In Vitro*. By R. S. Geiger, M.A., J. A. Dingwall, M.D., and W. DeW. Andrus, M.D., Chicago, Illinois and New York, New York 427

A Method for Preparing Thawed Erythrocyte-Glycerol Mixtures for Transfusion. By Henry A. Sloviter, Ph.D., M.D., Philadelphia, Pennsylvania 437

No. 5.—May

Glossopharyngeal Breathing As An Aid to Recovery from Paralytic Poliomyelitis. By William D. Loeser, M.D., Buffalo, New York 487

Coronary Arteriosclerotic Heart Disease in the Younger Age Group: Its Greater Frequency in This Group Among an Increasingly Older Necropsy Population. By Otto Saphir, M.D., Leonard Ohringer, M.D., and Herbert Silverstone, Ph.D., Chicago, Illinois 494

Electrocardiographic Observations in Patients with Cerebrovascular Accidents. By Fred Wasserman, M.D., Gaston Choquette, M.D., Ricardo Cassinelli, M.D., and Samuel Bellet, M.D., Philadelphia, Pennsylvania 502

The Mechanism of Copper Deposition in the Liver in Hepatolenticular Degeneration (Wilson's Disease). By L. Lahut Uzman, Capt., MC, USA, Frank L. Iber, 1st. Lt., MC, USA, Thomas C. Chalmers, Capt., MC, USA, and Marjorie Knowlton, M.S., Washington, D.C. 511

The Problem of Established Atrial Fibrillation. By Julian R. Beckwith, M.D., Julio A. Ibarra, M.D., and J. Edwin Wood, Jr., M.D. Charlottesville, Virginia 519

Study on the Effect of Overdoses of Pentylenetetrazol and Barbiturate Combinations in Human Volunteers. By Joseph F. Fazekas, M.D., Leo R. Goldbaum, Ph.D., Theodore Koppanyi, Ph.D., and James G. Shea, M.D., Washington, D. C. 531

The Response to Rescinnamine Administered Parenterally and Orally for the Treatment of Hypertension. By Robert L. Hershberger, M.D., Edward W. Dennis, M.D., and John H. Moyer, M.D., Houston, Texas 542

Clinical Evaluation of Acenocoumarin, A New 4-Hydroxycoumarin Anticoagulant. By Fred J. Schilling, M.D. and Oscar R. Kruesi, M.D., New York, New York 558

No. 6.—June

The Recovery of Poliomyelitis Viruses from Fecal Samples of Poliomyelitis Patients and Household Contacts. By C. Arden Miller, M.D., and Paul Kamitsuka, Kansas City, Kansas 607

Quantitation of the Activity of Rheumatoid Arthritis. I. A Method for Recording Its Systemic Manifestations. By John Lansbury, M.D., Philadelphia, Pennsylvania 616

Observations on Certain Viruses Causing Exanthematous Diseases in Man. By John F. Enders, Ph.D., Boston, Massachusetts 622

Clinical Manifestations of Ozone Poisoning: Report of a New Source of Exposure. By Morris Kleinfeld, M.D., and Charles P. Giel, M.D., New York, New York 638

The Effect of Corticotrophin (ACTH) on Ammonia Production in the Nephrotic Syndrome. By G. H. Heidorn, M.D., Hollidaysburg, Pennsylvania 644

The Combined Effects of Chlorpromazine and Pentobarbital on Cerebral Hemodynamics and Metabolism. By Joseph F. Fazekas, M.D., Salomon N. Albert, M.D., and Ralph W. Alman, M.D., Washington, D. C. 655

The Heart in Progressive Muscular Dystrophy. By Francis Grandell, M.D., Brooklyn, New York 659

Viscosity of the Blood *in Vitro* at Various Temperatures in 26 Patients with Raynaud's Phenomenon. By Per F. Hansen, M.D., and Niels A. Thorn, M.D., Copenhagen, Denmark 665

NEW BOOKS AND NEW EDITIONS

Book Reviews and Notices 117, 234, 365, 480, 601, 725

PROGRESS OF MEDICAL SCIENCE

Medicine

The Sprue Syndrome. By J. C. S. Paterson, M.R.C.P., New Orleans, Louisiana 92

Neurology and Psychiatry

Fainting: A Review of the Neuropsychiatric Aspects. By Robert H. Barnes, M.D., Durham, North Carolina 109

Surgery

Bladder "Substitutes." By John J. Murphy, M.D., Philadelphia, Pennsylvania 212

Ophthalmology

The Ocular Manifestations of Hypercalcemia. By HENRY P. WAGENER, M.D., Rochester, Minnesota . . . 218

Pathology and Bacteriology

Recent Advances in the Laboratory Diagnosis of Tuberculosis. By ROGER W. REED, M.A., M.D., C.M., and O. MORGANTE, M.D., M.Sc., Montreal, Canada . . . 320

Preventive Medicine and Epidemiology

Arctic Environment and Intestinal Infection. By JOAN G. BABBOTT, M.D., FRANK L. BABBOTT, JR., M.D., and JOHN E. GORDON, M.D., Boston, Massachusetts . . . 338

Oto-Rhino-Laryngology

Labyrinthine (Vestibular) Function Tests. II. Interpretation. By A. HARRY NEFFSON, M.D., Tucson, Arizona . . . 441

Dermatology and Syphilology

Some Aspects of Pigmentation of the Skn. By HERMAN BEERMAN, M.D., and HAROLD L. COLBURN, M.D., Philadelphia, Pennsylvania . . . 451

Therapeutics

Recent Contributions to Diuretic Therapy. By WALTER MODELL, M.D., New York, New York . . . 564

Pediatrics

The Turnover and Circulation of the Plasma Proteins in the Body. By R. J. SLATER, M.D., and A. SASS-KORTSAK, M.D., Toronto, Ontario, Canada . . . 669

Gynecology and Obstetrics

Human Infertility. By C. LEE BUXTON, M.D., New Haven, Connecticut . . . 694

Radiology

Cholecystography and Cholangiography: A Review of Present Methods of Examination. By NOEL H. ALDRIDGE, M.B., CH.B., D.M.R.D., Baltimore Maryland . . . 701

Proceedings of The Physiological Society of Philadelphia . . . 231, 361, 476, 597, 722